

# The Transition to Digital Television in Berlin

Observations from January 2004 Visit

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# **Introduction:**

## **Why We Went to Germany**

- Germany is Transitioning to Digital TV by 2010
- Berlin's flashpoint transition: All analog TV was switched to digital on August 4, 2003
- How did this happen?
- Does Berlin provide a model for completing the digital transition here?

# **Our Meetings**

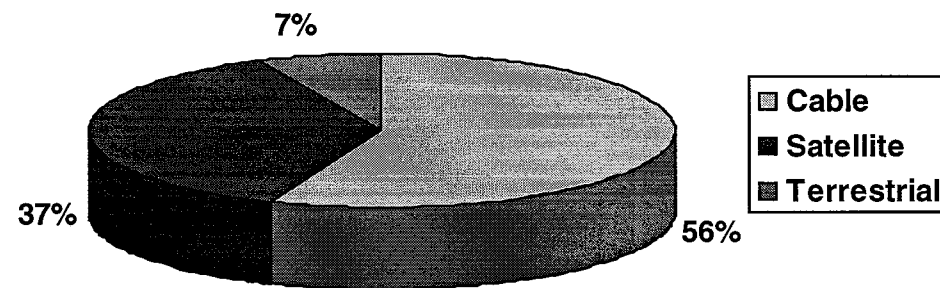
- **Regulators**
- **Media Representatives**
- **Network Facilities Operator**
- **Technical Experts**

# What We Learned

- The Berlin transition went smoothly, BUT . . . .
- The German transition differs from the U.S. transition in several key respects:

- **Key difference between German and US market shares:**

- Only 7% of German households rely on over-the-air broadcasting:



# Key Differences in Transition's Purposes

- U.S.
  - Advanced Services, esp. HDTV
  - More efficient use of spectrum
- Germany
  - Continued justification of fee to support public broadcasting
  - Continued justification of transmission expense for private broadcasters

- **Key differences between German and U.S. Cable Television:**

- Many fewer channels of programming
- Most programming provided by broadcasters
- Programmers pay for carriage, not vice versa; no programming supported by subscriber fees
- “Must Carry” includes payment from broadcasters (“just and reasonable” price, subject to negotiation)
- Choice of analog or digital carriage at operator’s discretion

- **Key differences between German and U.S. Cable Television (cont.):**
  - Stunted development of cable modem service; DSL is dominant high-speed Internet service provider



- **Satellite Service in Germany More Competitive:**
  - Subscribers pay a one time fee for equipment and then receive programming (690 channels) at no additional cost
  - No “middleman”; it’s free

# Key Benefits for Berlin Consumers

- Multicasting: Unique for Germany vs. US
  - Replace one analog channel with up to four digital channels (with EPG) – 27 digital channels in Berlin
  - Provide over-the-air competition to cable's *30-channel* offering
  - More leverage in negotiating with cable operators

# Other Perceived Benefits

- Mobile Applications
  - Digital enables TV reception in vehicles traveling at high speed.
  - Digital expected to enable reception of TV on low power handheld devices
  - TV and Internet service on cell phones

# Key Elements (cont.)

- HDTV – Not a Factor
  - Not enough spectrum available to support HD terrestrial broadcast
  - Broadcasters not interested in supporting or promoting this technology
  - No HDTV sets available in the German marketplace

## *Customer Premises Equipment*

- **Availability:** More than 70 models of digital set-top receivers to date.
- **Price:** Approximately 109 to 200 Euros today – but some boxes were available at special introductory price (approximately 100 Euros) prior to completion of the transition.
- **Subsidies:** Approximately 6,000 receivers were provided to low-income households at no cost (But this program will no longer be offered going forward).
- **Consumer Response:** More than 85,000 households purchased equipment prior to the end of the transition in August 2003. By winter 2004, more than 200,000 receivers have been purchased in Berlin.

## *How Does Cable Carry Digital Broadcast Signals*

- Operators have *discretion* to carry in analog or digital, but currently carry in analog
- Of the new digital channels available over the air, cable operators *already* were carrying virtually all in analog

# Conclusion

- In the local circumstances in Berlin, it was possible to shut off analog TV on a date certain with minimal disruption, BUT . . .
- It's highly uncertain whether those unique circumstances exist even elsewhere in Germany. They do not exist in the United States